FACT SHEET FOR NPDES PERMIT WA-000104-0

Abitibi Consolidated Sales Corporation

4302 Chambers Creek Road

Steilacoom, Washington 98388-1528

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INTRODUCTION

The Federal Clean Water Act (FCWA, 1972, and later modifications, 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One mechanism for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System of permits (NPDES permits), developed by the United States Environmental Protection Agency (EPA). The EPA has delegated responsibility to the State of Washington to administer the NPDES permit program. The legislature accepted the delegation and assigned it, to the Department of Ecology. Chapter 90.48 RCW defines Ecology's authority and obligations to administer the wastewater discharge permit program.

Regulations adopted by the State tell how Ecology will exert its delegated and legislated powers, and how it will fulfill its delegated and legislated duties. Those rules include:

- procedures for issuing permits (Chapter 173-220 WAC),
- water quality criteria for surface waters (Chapters 173-201A WAC),
- water quality criteria for (under) ground waters (Chapter 173- 200 WAC), and
- sediment management standards (Chapter 173-204 WAC).

Federal and state laws require that a commercial facility obtain an NPDES permit before discharging waste to waters of the state. These regulations also establish the bases for effluent limitations, pollution control technology, and other performance requirements included in the permit. Under these laws Ecology must prepare a draft of the NPDES permit and an accompanying fact sheet (WAC 173-220-060) for public examination and comment.

- The permit contains all legal performance requirements for the facility's pollution control, including wastewater treatment systems and monitoring methods and reporting schedules.

- The fact sheet details facts about the physical plant, its product output, the character and amount of its waste, and its compliance history. After issuing the permit, details Ecology adds an Appendix to the Fact Sheet that details all of the steps Ecology took encouraging public examination and evaluation of the draft permit.

The permittee previewed the fact sheet and draft permit for accuracy. Ecology corrected any errors or omissions identified by the permittee before offering the documents for public scrutiny. After the public comment period close, the Department will summarize substantive comments and explain how they influenced conditions in the final NPDES permit. The summary and response to comments become part of the legal record about the permit. Any person who submits a timely comment, or who asks to be included on the mailing list for the facility, will receive a copy of the Department's response. Comments and any resulting changes to the permit will be summarized in Appendix C to the Fact Sheet.

GENERAL INFORMATION	
Applicant	Abitibi Consolidated Sales Corporation
Facility Name and Address	West Tacoma Division 4302 Chambers Creek Road, Steilacoom, WA 98388-1528
Type of Facility:	Thermo-Mechanical and Deinking Pulp and Newsprint Paper Mill
SIC Code	2621
Discharge Location	Waterbody name: Puget Sound and Chambers Creek Latitude: 47° 11' 08" N. Longitude: 122° 35' 05" W.
Water Body Identification Number	05-12-09, 05-12-07

DESCRIPTION OF THE FACILITY

HISTORY

The mill started producing pulp made out of rags and waste paper in 1919. Its production of newsprint from whole logs, started in 1946. Boise Cascade Corporation acquired the mill in 1969. In 1975 the company constructed a thermo-mechanical pulp mill line. A recycling line was completed in 1993. Rainy River Forest Products took ownership of the mill in 1994 and merged with Stone-Consolidated in late 1995. On December 31, 1997, Stone-Consolidated and Abitibi-Price Sales merged to form Abitibi Consolidated Sales Corporation. The Abitibi Consolidated Sales Corporation presently owns the pulp and paper mill. In 2001 the Abitibi mill shutdown its operations, indefinitely, but the owners want to retain the mill's permit status for any future buyer.

INDUSTRIAL PROCESS

The average production during 1997 to 2000 was 547 air-dried tons per day (ADTD).But the mill's production steadily decreased after January 1997. The owners decided to shut down production altogether, due to market conditions, so the facility was idled in January 2001. The mill produced an average of 498 tons per day of newsprint paper during its last three years of operation. If market conditions improve, the mill could increase production to its 1997 level.

Ecology sent a copy of the draft permit and fact sheet to the permittee in July 2005, to review for technical accuracy. The newsprint paper was made from 58.6 % TMP pulp, 40.8 % deinked pulp, and 0.6 % nonintegrated pulp. The nonintegrated pulp input was being phased out at the time of shutdown. Ecology calculated the effluent allowance for BOD and TSS on a productioin rate of 324 tons/day made by the thermo-mechanical pulp mill (TMP) and 223 tons/day made by the recycling facility. The TMP pulp mill has an initial chip washing facility.

Before the shutdown in 2001, the mill employed 200 people and operated 24 hours per day. The mill operated nearly 52 weeks each year, except for a periodic one-week maintenance shutdown.

The mill drew freshwater from Chambers Creek and Garrison Creek to use in the paper making process after filtering. Four (4) on-site deep water wells also supplied process water. Waste water from the pulp and paper making process received primary and secondary treatment before its discharge into Puget Sound. For the last three years of operation, wastewater effluent flow averaged 6.1 million gallons per day (MGD). No chlorine bleaching chemicals were used in the pulping process; therefore, no dioxin-related compounds formed in the pulping process.

DISCHARGE OUTFALL

The mill's process wastewater (Outfall 001) discharged through a 30 inch submerged line. The Outfall 001 submerged line begins 960 feet SSW of Chambers Creek, and extends 400 feet WNW into Puget Sound. The wastewater discharged through a diffuser system 96 feet long, with ten 6-inch alternating ports.

Outfall 002, the fresh water filter backwash, discharges back into Chambers Creek at the pump /filter house. The flow from Outfall 002 is about 0.8 MGD. Outfalls 003 and 004 discharge storm water; Outfall 003 discharges stormwater from the northern property area and Outfall 004 discharges stormwater from the administration parking lot. Outfalls 005 and 006 are sealed closed. Outfall 007 (potable water well #1 overflow) and Outfalls 008-011 (freshwater clarifier overflow) discharge to Chambers Creek via Garrison Creek. These outfalls have very small flows, (0.001 MGD).

SANITARY WASTE WATER

The company discharges all sanitary wastewater to the city of Steilacoom's collection system, where it is pumped to the Pierce County wastewater treatment system.

PERMIT STATUS

The previous permit for this facility was issued in June 2000, while the mill produced paper products. It placed effluent limitations on biochemical oxygen demand (BOD_5), total suspended solids (TSS), pH, and acute toxicity. The previous permit also required the permittee to monitor flow, temperature, production, and fecal coliform. The permittee was required to monitor copper in the receiving water. An application for permit renewal, submitted to the Department in June 2005 and accepted by the Department in July 2005, acknowledges that the mill is currently shutdown indefinitely.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received a Class II compliance inspection on February 2, 2000.

The permittee's Discharge Monitoring Reports (DMRs) and Ecology's inspections showed that the facility operated in compliance during the previous permit term, except for one time in January 1998. The permittee exceeded its monthly limit of 6,760 lbs. BOD_5/day for the month of January 1998 by discharging 7,900 lbs. BOD_5/day. Ecology penalized the permittee for this violation, imposing a fee of $10,000. No permit violations were reported since (the past 7 years).

WASTEWATER CHARACTERIZATION

The proposed process wastewater discharge is characterized for the following regulated parameters. The results yielded the data from representative samples:

Table 1: Wastewater Characterization (Process wastewater- Outfall 001)

Parameter	Concentration
BOD_5	71 mg/L
COD	520 mg/L
TOC	78 mg/L
TSS	238 mg/L
Temperature	29 °C
Color	>60
Fecal coliform	986 #/100 ml
Total organic nitrogen	4.3 mg/L
Phosphorus - Total	0.94 mg/L
Sulfate	370 mg/L
Surfactants	0.22 mg/L
Aluminum	0.33 mg/L
Barium	0.063 mg/L
Boron	0.13 mg/L
Iron – Total	0.51 mg/L
Magnesium	9.8 mg/L
Molybdenum	0.011 mg/L
Manganese	0.77 mg/L
Titanium	0.027 mg/L
Copper	0.026 mg/L
Lead	0.0086 mg/L
Selenium	0.0037 mg/L
Zinc	0.43 mg/L
Cyanide - Total	0.023 mg/L
Phenols	0.07 mg/L
Diethyl Phthalate	0.39 mg/L
Di-N-Octyl Phthalate	0.13 mg/L

The samples taken in October 1999 for wastewater characterization analysis yielded the above results. The owner submitted them with the renewal application in October 27, 1999. The mill generated the discharges that reflected normal operation conditions of the facility at the time the samples were collected. During the renewal NPDES application in 2005, sampling was not possible because of the mill's non-production status – not considered by Ecology to qualify as "normal operation". Any samples collected during non-production status, could not qualify as "representative" as required by Section S.2.A, Sampling and Analytical Procedures. Nor would such samples conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136, or to the *Standard Methods for the Examination of Water and Wastewater* (APHA). Recognizing the mill's current status, the permittee must conduct an effluent characterization and resume pollutant scan analysis –using the EPA guideline identified in Section S.1.F— after it reactivates mill production.

The permittee must submit a new renewal permit application no later than 180 days after the mill start-up, including effluent characterization and pollutant scan data.

SEPA COMPLIANCE

There are no SEPA requirements for the issuance of this permit.

PROPOSED PERMIT LIMITATIONS

Federal and State regulations require that effluent limitations set forth in any NPDES permit be either technology- or water quality-based. Technology-based limitations refer to reasonable treatment methods available to minimize the risk of harm from specific pollutants. Technology-based limitations are set by regulation or developed on a case-by-case basis (40 CFR 125.3, and Chapter 173-220 WAC). Water quality-based limitations rely upon the facility operator's compliance with the Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Standards (Chapter 173-200 WAC), Sediment Quality Standards (Chapter 173-204 WAC) or the National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). The more stringent of these two limits applies to each parameter of concern. The two types of limits are described in more detail below.

The limits in this permit rely in part on information received in the application. Ecology evaluated the effluent constituents identified in the application on both a technology- and a water quality basis. Ecology determined those limits deemed necessary by the rules and regulations of the State of Washington, and included them in this permit.

Ecology does not develop effluent limits for every pollutant reported on the application as present in the effluent. Some pollutants may not be treatable at a reasonable cost, or some may not be controllable at the source; some pollutants are not listed in the regulations, and some do not have a reasonable potential to cause a water quality violation.

If significant changes occur in any constituent, as described in 40 CFR 122.42(a), the Permittee must notify the Department of Ecology. The Permittee may be subject to penalties, until such time as the permit is modified to address the additional discharge of pollutants.

DESIGN CRITERIA

Pollutant flows or waste loadings won't exceed approved design criteria [WAC 173-220-150 (1)(g)]. Abitibi's treatment facility provides secondary treatment to all wastewater. To maintain design criteria, the permittee must regularly inspect the wastewater aeration basin, to confirm liner integrity and prevent solids buildup during the life of this permit.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

Technology-based limitations are either set by regulations in guidelines or must be developed for an individual discharger or pollutant on a case-by-case basis. The "best practicable control technology currently available" (BPT) is defined in federal effluent guidelines at Part 430 Subpart M for the groundwood-thermomechanical subcategory; in Part 430 Subpart Q for the de-inking subcategory (new source performance) where Abitibi makes newsprint; and in Part 430 Subpart R where nonintegrated pulp is made or used. These guidelines were published in the federal register on November 18, 1982 and March 30, 1983.

The federal effluent guidelines for "best conventional pollutants control technology" (BCT) for these categories were defined on December 17, 1986 to be the same as BPT --previously defined in March 1983. Because the EPA defined the BCT and BPT standards more than ten years ago, Ecology must determine whether they still define a valid standard and whether that standard can still be considered equivalent to all known and reasonable treatment (AKART) for these categories of paper making.

On April 15, 1998 the EPA issued effluent guidelines for the Bleached Kraft Papergrade and Soda subcategories and for the Papergrade Sulfite subcategory. The 1998 allowances for BOD and TSS, one pound per 1000 pounds of pulp produced, were set at the same value as the allowances in the effluent guidelines published in 1982. But the 1998 effluent guidelines combined consideration of both emissions to air and discharges to water, and they included chlorinated organic compounds. They also require secondary treatment of wastewater.

In 1993 during construction of the de-inking facility, the permittee updated the aeration basin diffuser system and built a secondary clarifier. The diffused air system increases mixing and prevents solids buildup in the aeration basin. The secondary clarifier removes suspended solids. The design report for the wastewater treatment system projected that it would remove 82 - 83 % of solids and 86 - 87 % of BOD_5 from the raw wastewater.

Throughout the history of the effluent guidelines, secondary treatment has been the accepted standard for BOD and TSS removal. Based on the April 15, 1998 guidelines, Ecology expects this trend to continue. Ecology therefore determines that the effluent guidelines for the TMP paper production, the de-inking paper production, and the nonintegrated paper production, are equivalent to AKART for the following reasons:

1. The mill wastewater flow had three components – the TMP pulp production, de-inked pulp production, and nonintegrated. But since the mill has indicated that the nonintegrated pulp is being phased out, we did not include the nonintegrated pulp category in our calculation of the TSS and BOD limits.

2. The guidelines promulgated on April 15, 1998 included no changes for Abitibi's type of paper making.
3. Secondary treatment has been and is expected to remain the standard of treatment that the effluent guidelines are based on.
4. At least one other permit has been issued with the 1982 effluent guidelines being determined to be equivalent to AKART.

Therefore, 40 CFR 430.132 Subpart M applies to the Thermo-Mechanical portion of the production and 40 CFR 430.175 Subpart Q applies to the de-inked portion of the production. Effluent guidelines allowances for these types of production are given below:

	BOD 30 day ave lbs/1000 lbs	**BOD** daily max lbs/1000 lbs	**TSS** 30 day ave lbs/1000 lbs	**TSS** daily max lbs/1000 lbs
TMP	5.55	10.6	8.35	15.55
Chip washing	0.05	0.05	0.15	0.30
De-inked	3.2	6.0	6.3	12.0

The production value used is given below:

Production	TMP tons/day	Deinked tons/day	Combined production Total tons/day
Base	324	223	547

The limits are calculated using the production and allowances indicated. The effluent limits are summarized below:

BOD Monthly Average	**BOD** Daily Maximum	**TSS** Monthly Average	**TSS** Daily Maximum
5100	9600	8300	15600

The proposed limits for the daily maximum BOD and TSS are reduced by 25 percent from the previous permit.

Production is currently shut down but the permittee wants to retain the mill's permitted status for future reactivation. Existing facility outflow is now comprised of storm water and various fresh water sources—none derived from production processes. Any discharges containing BOD and TSS are minute, causing negligible environmental impacts. The mill's outflow is monitored and measures approximately 0.2 MGD.

Given the mill's non-production, the potential to exceed permit limits is very low. Based upon the monthly data reports required by Order No. DE 01WQIS-340 (pursuant to RCW 90.48.260 and RCW 90.48.160) this permit grants relief from monitoring activities during the mill's continued non-production status. The proposed permit presents two tiers, one applies while the mill

remains in non-production status (Tier 1) and the other applies when the mill resumes normal operations (Tier 2). During the mill shutdown, BOD and TSS average 5 lbs/day and 8 lbs/day, respectively; i.e., 0.05% and 0.1% of the permit limits during production.

SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS

To protect existing water quality and preserve the designated beneficial uses of Washington's surface waters (WAC 173-201A-060), waste discharge permits are conditioned so the discharge will meet established Surface Water Quality Standards (Chapter 173-201A WAC). Surface water quality-based effluent limitations may be based on an individual waste load allocation (WLA) or on a WLA developed during a basin-wide total maximum daily loading study (TMDL). When surface water quality-based limits are more stringent --or potentially more stringent-- than technology-based limitations, Ecology uses them as limitations in the permit.

NUMERICAL CRITERIA FOR THE PROTECTION OF AQUATIC LIFE

"Numerical" water quality criteria (Chapter 173-201A WAC) specify the levels of pollutants allowed in a receiving water while remaining protective of aquatic life. Ecology uses numerical criteria set forth in the Water Quality Standards, along with chemical and physical data for the wastewater and the receiving water, to derive the effluent limits in the discharge permit.

NUMERICAL CRITERIA FOR THE PROTECTION OF HUMAN HEALTH

The U.S. Environmental Protection Agency defined 91 numeric water quality criteria for the protection of human health (EPA 1992) that apply in Washington State. These criteria are designed to protect humans from exposure to cancer and other disease-causing pollutants. We apply them primarily to fish and shellfish consumption, and to drinking water drawn from surface waters.

NARRATIVE CRITERIA

In addition to numerical criteria, "narrative" water quality criteria (WAC 173-201A-030) limit the discharge of toxic, radioactive, or deleterious material to concentrations below those which have the potential to adversely affect characteristic water uses, cause acute or chronic toxicity to biota, impair aesthetic values, or adversely affect human health. Narrative criteria protect the specific beneficial uses of all fresh (WAC 173-201A-130) and marine (WAC 173-201A-140) waters in the State of Washington.

ANTIDEGRADATION

The State of Washington's Antidegradation Policy prohibits discharges into a receiving water that would degrade the existing water quality of the water body. If the natural condition of a receiving water is lower quality than the assigned criteria, then the natural condition constitutes the water quality criteria. Similarly, when the natural conditions of a receiving water are higher quality than the assigned criteria, the natural conditions constitute the water quality criteria. Refer to WAC 173-201A-070 for more State Anti-degradation Policy information.

Ecology can’t determine, by reviewing existing records, whether ambient water quality is higher or lower than the designated classification criteria given in Chapter 173-201A WAC; so Ecology

will use the designated classification criteria for this water body, in the proposed permit. The discharges authorized by this proposed permit should not cause a loss of beneficial uses.

CRITICAL CONDITIONS

Ecology derives surface water quality-based limits from the critical condition of the receiving water –the highest potential for adverse impacts on aquatic biota, human health, and existing or characteristic water body uses.

MIXING ZONES

Water Quality Standards allow the Department of Ecology to authorize mixing zones around a point of discharge. Within the zone, pollutant concentrations may exceed surface water quality-based effluent limits. Ecology may authorize both "acute" and "chronic" mixing zones near the point of discharge for pollutants that can have a toxic effect on the aquatic environment. But the pollutant concentration at the boundary of either mixing zone may not exceed the numerical criteria for that type of zone. Ecology may authorize a mixing zone for a facility's discharge only where the discharges receive all known, available, and reasonable methods of prevention, control and treatment (AKART) and in accordance with other mixing zone requirements of WAC 173-201A-100.

The National Toxics Rule (EPA, 1992) allows the chronic mixing zone to be used to meet human health criteria.

DESCRIPTION OF THE RECEIVING WATER

The facility's Outfall 001 discharges to Puget Sound and Outfall 002 discharges to Chambers Creek. Both are designated as Class AA receiving waters in the vicinity of the outfall. Pierce County's wastewater treatment system discharges within a mile from the permittee's outfall. Minor storm water discharges come from the Little Marina and the Ferry Dock. Minor non-point sources of pollutants include the Oakbrook subdivision, Clover Creek drainage basin, and Western State Hospital.

Characteristic uses include industrial water supply (Chambers Creek, Garrison Creek, and deep wells); fish migration; fish and shellfish rearing, spawning and harvesting; wildlife habitat; primary contact recreation; sport fishing; boating and aesthetic enjoyment; commerce and navigation. Water quality of this class shall markedly and uniformly exceed the requirements for all or substantially all uses.

SURFACE WATER QUALITY CRITERIA

Applicable criteria are defined in Chapter 173-201A WAC for aquatic biota. In addition, the U.S. EPA published human health criteria for toxic pollutants (EPA 1992). Criteria for this discharge are summarized below:

Fecal Coliforms	14 organisms/100 mL maximum geometric mean
Dissolved Oxygen	7 mg/L minimum
Temperature	13 degrees Celsius maximum or incremental increases above background
pH	7.0 to 8.5 standard units
Turbidity	less than 5 NTU above background
Toxics	No toxics in toxic amounts (see Appendix C for numeric criteria for toxics of concern for this discharge)
Aesthetic value	Shall not be impaired by presence of material or their effects excluding those of natural origin, which offend the senses of sight, smell, touch, or taste.

CONSIDERATION OF SURFACE WATER QUALITY-BASED LIMITS FOR NUMERIC CRITERIA

If pollutant concentrations in the proposed discharge exceed water quality criteria limits despite technology-based pollution controls that the Department determined to be AKART, then Ecology may allow mixing zones. The allowance is prescribed by a geometric configuration, flow restriction, and other limited exceptions for mixing zones in Chapter 173-201A WAC.

Ecology determined the dilution factors of effluent to receiving water that occur within these zones at the critical condition, in April 1994. Ecology used the UDKHDEN model for near field dilution and the Brooks method to obtain the far field. The dilution factors determined were:

	Acute	Chronic
Aquatic Life	27	152
Human Health, Carcinogen		152
Human Health, Non-carcinogen		152

Pollutants in an effluent may affect the aquatic environment near the point of discharge (near field) or at a considerable distance from the point of discharge (far field). Toxic pollutants, for example, are near-field pollutants--their adverse effects diminish rapidly with mixing in the receiving water. Conversely, a pollutant such as BOD is a far-field pollutant whose adverse effect occurs away from the discharge even after dilution has occurred. Thus, the method of calculating surface water quality-based effluent limits varies with the point at which the pollutant has its maximum effect.

The derivation of surface water quality-based limits also takes into account the variability of the pollutant concentrations in both the effluent and the receiving water.

The impacts of dissolved oxygen deficiency, temperature, pH, fecal coliform, chlorine, metals, and other toxics were determined as shown below, using the dilution factors at critical conditions described above.

Dissolved Oxygen-- Due to the large dilution factor and the high current speed, Ecology determined that the receiving waters will not be adversely affected by these discharges.

BOD_5--This discharge with technology-based limitations results in a small amount of BOD loading relative to the large amount of dilution occurring in the receiving water at critical conditions. Technology-based limitations for BOD will be protective of dissolved oxygen criteria in the receiving water.

Temperature-- The impact of the discharge on the temperature of the receiving water was modeled by simple mixing analysis at the critical condition. The receiving water temperature at the critical condition is 13.7 ^oC and the effluent temperature is 35.6 ^oC. The results of mixing were simulated using the EPA certified UDKHDEN Model. Thus we predicted the temperature at the boundary of the chronic mixing zone at 13.84 ^oC and the incremental rise at 0.14 ^oC. The receiving water temperature is higher than 13 ^oC, so the incremental increase allowed will be [t = 8/(T-4)], where t is the allowed incremental increase and T is the background temperature. At 13.7 ^oC, t is 0.82. Since the calculated incremental increase is less than the allowed increase, the permit imposes no limits for temperature –but the permit's retained temperature monitoring requirement will verify the accuracy of Ecology's calculations.

pH--Because of the high buffering capacity of marine water, compliance with the technology-based limits of 6 to 9 will assure compliance with the Water Quality Standards for Surface Waters. Under critical conditions therefore, technology-based effluent limitations for temperature and pH should suffice in the permit. The previous permit had a minimum pH limit of 6.0 SU with a maximum pH limit of 9.0 SU --with no exceptions—and the permittee met this limit. Because the mill's wastewater treatment system is capable of meeting the limit, Ecology includes this condition in the proposed permit.

Fecal coliform -- The previous permit required that the mill monitor for fecal coliform quarterly. The result of this data showed no water quality violations. The permit imposes no fecal coliform limits for this permit term.

Turbidity--The impact of turbidity was evaluated based on the range of turbidity in the effluent and turbidity of the receiving water. Due to the large degree of dilution, Ecology determined that the turbidity criteria would not be violated outside the designated mixing zone.

Toxic Pollutants--Federal regulations (40 CFR 122.44) require NPDES permits to contain effluent limits for toxic chemicals whenever there is a reasonable potential for those chemicals to exceed the surface water quality criteria. This process occurs concurrently with the derivation of technology-based effluent limits. Facilities with technology-based effluent limits defined in regulation are not exempted from meeting the Water Quality Standards for Surface Waters or from having surface water quality-based effluent limits.

The following toxics were determined to be present in Abitibi's discharge during production: total cyanide, chlorine residual, and lead; selenium, zinc, copper, and phenols. Ecology conducted a reasonable potential analysis (See Appendix C) on these parameters to determine whether this permit would impose effluent limitations. Water quality criteria for metals, described in Chapter 173-201A WAC, are based on the dissolved fraction of the metal.

Ecology's determined the reasonable potential for cyanide discharges to exceed water quality criteria, using EPA, 1991 (Appendix C) procedures, applied to the critical condition. Abitibi measured total cyanide concentration and reported the result on the permit application. But the

water quality criteria are based on weak and dissociable measures. Because Abitibi reported no data on the weak and dissociable measurement in the permit application, Ecology used the total cyanide in the "reasonable potential to exceed" determination. The critical condition in this case occurs at mean low water (MLLW). The parameters used in the critical condition modeling are as follows: acute dilution factor 27, chronic dilution factor 152, receiving water temperature 13.7^{o}C. The permittee was required to determined weak and dissociable cyanide in the effluent and report the results to Ecology. The Effluent Study for Cyanide (Weak & Dissociable) report was submitted in January 2001. Since the mill has been shut down indefinitely, Ecology has decided that the reasonable potential evaluation would be deferred to the later date when Abitibi restarts its operations.

For the previous permit, the permittee reported the concentration of copper in the receiving water near outfall 001. Based on this report, Ecology found no reasonable potential for Abitibi's discharge to exceed water quality criteria for copper. Therefore, no permit limit is required.

Abitibi had no receiving water data for zinc near the outfall. However, in 1985, NOAA determined the concentration of zinc at various sites within Puget Sound. The highest levels of zinc measured 2.4 ppb at Dalco Passage and 0.7 ppb in the outer region of Commencement Bay. Ecology assumes the sites where these values were measured have higher zinc concentrations than occur near the mill's outfall. Since using the highest value of zinc from the 1985 data results in no reasonable potential to exceed water quality criteria, the discharge would not cause a violation of the water quality criteria for zinc in the vicinity of the mill's outfall.

However, there would be a possible adverse impact to sediments. Best professional judgment required that the mill operators find the sources of zinc pollution and reduce them. This way, the sediment would be protected. In January 2001, Abitibi submitted a Best Management Plan for Zinc. But since the paper mill ceased production indefinitely, further action concerning the impact of zinc discharges to sediment are deferred to a later date when Abitibi restarts.

No chlorine compounds are used for bleaching at the mill. The detected chlorine residual is from the interference of other chemicals in the wastewater effluent. Therefore, no further actions are required.

All other parameters detected in the effluent were below the acute, chronic, or health quality criteria. Therefore, the permit requires no receiving water study.

WHOLE EFFLUENT TOXICITY

The Water Quality Standards for Surface Waters require that effluent not cause toxic effects in the receiving waters. Many toxic pollutants cannot be detected by commonly available methods. However, toxicity can be measured directly by exposing living organisms to the wastewater in laboratory tests and measuring the response of the organisms. Toxicity tests measure the aggregate toxicity of the whole effluent, and therefore this approach is called whole effluent toxicity (WET) testing. Some WET tests measure acute toxicity and other WET tests measure chronic toxicity.

Acute toxicity tests measure mortality as the significant response to toxins in the effluent. Dischargers who monitor their wastewater with acute toxicity tests are providing an indication of the potential lethal effect of the effluent to organisms in the receiving environment.

Chronic toxicity tests measure various sub-lethal toxic responses such as retarded growth or reduced reproduction. Chronic toxicity tests often involve either a complete life cycle test of an organism with an extremely short life cycle, or a partial life cycle test on a critical stage of one of a test organism's life cycles. Organism survival is also measured in some chronic toxicity tests.

Accredited WET testing laboratories comply with the proper WET testing protocols, data requirements, and reporting format. Accredited laboratories are knowledgeable about WET testing and capable of calculating an NOEC, LC_{50}, EC_{50}, IC_{25}, etc. All accredited laboratories receive and use the most recent version of the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* (referenced in the permit). This publication is available from Ecology's Publications Distribution Center in Lacey; phone (360) 407-7472 to request a copy. Ecology recommends that Permittees send a copy of the acute or chronic toxicity sections(s) of their permits to their laboratory of choice.

The WET tests performed during effluent characterization indicated no reasonable potential to cause receiving water acute or chronic toxicity, so the permit will not include an acute WET limit or a chronic WET limit. However, if a rapid screening test indicates toxicity, the Permittee must investigate immediately and take appropriate action. Regardless, Abitibi will be required to test the effluent within 90 days after restarting its operation.

If the Permittee makes process or material changes which, in the Department's opinion, results in an increased potential for effluent toxicity, then the Department may require additional effluent characterization in a regulatory order, by permit modification, or in the permit renewal. Toxicity is assumed to have increased if WET testing conducted for submission with a permit application fails to meet the performance standards in WAC 173-205-020, the whole effluent toxicity performance standard. The Permittee may demonstrate to the Department that changes have not increased effluent toxicity, by performing additional WET testing after such process or material changes are made.

HUMAN HEALTH

Washington's water quality standards include 91 numeric health-based criteria that must be considered in NPDES permits. These criteria were developed by the U.S. EPA in its National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992).

Ecology determined the mill's discharge's potential to cause an exceedance of the water quality standards, as required by 40 CFR 122.44(d). Ecology used procedures given in the Technical Support Document for Water Quality-Based Toxics Control (EPA/505/2-90-001) and the Department's Permit Writer's Manual (Ecology Publication 92-109, July, 1994). The results indicated Abitibi's discharge has no reasonable potential to cause a violation of water quality standards, thus an effluent limit is not warranted

SEDIMENT QUALITY

The Department of Ecology's aquatic sediment standards (Chapter 173-204 WAC) protect both aquatic biota and human health. Ecology may require Permittees to evaluate the potential for their discharges to cause a violation of applicable standards (WAC 173-204-400). Based on Ecology's review of the 1995 baseline sediment monitoring data submitted in the facility's August 1996 sediment data report, and on Ecology's review of the facility's effluent monitoring data submitted in 1999, the Department determined that the discharge has the potential to cause violations of sediment quality standards. Ecology also evaluated Abitibi Consolidated's 1999 effluent quality data (submitted for permit renewal) for the potential to exceed sediment quality standards. Ecology found that heavy metals, notably zinc, may potentially exceed sediment quality criteria due to the quality of the facility's wastewater discharge. Based on this review, a condition in the proposed permit requires the Permittee to conduct baseline sediment monitoring in the area surrounding the discharge diffusers upon restart of operations. The focus of the monitoring will be to resample and analyze the sediment quality to address the nature and extent of the contamination found by sediment monitoring in 1995.

GROUND WATER QUALITY LIMITATIONS

The Department's Ground Water Quality Standards (Chapter 173-200 WAC) protect beneficial uses of subsurface (underground) water. Permits issued by the Department must be conditioned in such a manner so as not to allow violations of those standards (WAC 173-200-100). Because the permittee doesn't discharge to the ground, the permit includes no limitations based on potential effects to ground water.

COMPARISON OF EFFLUENT LIMITS WITH THE PREVIOUS PERMIT (APRIL 4,1996)

	Existing Limits		Proposed Limits	
	Monthly Average (lbs./day)	Daily Maximum (lbs./day)	Monthly Average (lbs./day)	Daily Maximum (lbs./day)
BOD_5	5,760	12,813	5,100	9,600
TSS	11,685	20,685	8,300	15,600
	Minimum	Maximum	Minimum	Maximum
pH	6.0	9.0	6.0	9.0

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are required (WAC 173-220-210 and 40 CFR 122.41) to verify that the treatment process is functioning correctly and the effluent limitations are being achieved. The monitoring schedule and protocols are detailed in the proposed permit under Condition S.1, Tier 1 or 2 and Condition S.2. Specified monitoring frequencies takes into account the quantity and variability of the discharge, the treatment method, past compliance,

significance of pollutants, and cost of monitoring. During the shutdown, Ecology specifies monitoring requirements to be followed as prescribed in "Tier 1" in the permit.

LAB ACCREDITATION

With the exception of certain parameters the permit requires all monitoring data to be prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 WAC, *Accreditation of Environmental Laboratories.* The laboratory at this facility is accredited for pH, dissolved oxygen, total suspended solids, and biochemical oxygen demand.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The requirements of Special Conditions S3 are based on the Ecology's authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-220-210).

NON-ROUTINE AND UNANTICIPATED DISCHARGES

Occasionally, this facility may generate wastewater that is not characterized in this permit application. The possible uncharacterized wastewater is not a routine discharge; such unforeseen discharge was not anticipated at the time of application. These anomalies typically are waters used to pressure-test storage tanks or fire water systems, or they are leaks from drinking water systems. They are typically clean waste waters but may be contaminated with pollutants. The permit contains an authorization for non-routine and unanticipated discharges. The permit requires Abitibi to characterization these waste waters for pollutants and to identify opportunities for reuse. Ecology may authorize a direct discharge via the process wastewater or stormwater outfalls for clean water, may require that the wastewater be processed through the facility's wastewater treatment process, or may require the permittee to reuse it – depending on the nature and extent of pollutants in the wastewater and opportunities for reuse.

SPILL PLAN

Prior to shutdown, Abitibi stored a quantity of chemicals on site that have the potential to cause water pollution if accidentally released. The Department required the Permittee to develop best management plans to prevent any accidental release [section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA), and RCW 90.48.080]. The Permittee developed such a plan for preventing accidental release of pollutants to state waters, and for minimizing damages if such spills should occur. The proposed permit requires the Permittee to update this plan and to maintain it on site upon restart of operations.

SOLID WASTE PLAN

The proposed permit requires the Permittee, upon restart of operations, to update the solid waste plan designed to prevent solid waste from causing pollution of state waters. The plan must be maintained on site for the local permitting agency and/or for the Department's review.

OUTFALL EVALUATION

The permittee inspected outfall 001 during the previous permit. The outfall appeared to be in good conditions. However, the proposed permit will require the Permittee to again conduct an outfall inspection and submit a report detailing the findings of that inspection. The purpose of the inspection is to determine the condition of the discharge pipe and diffusers and to evaluate the extent of sediment accumulations in the vicinity of the outfall.

STORMWATER PLAN

Stormwater from the majority of the mill is treated and discharged with the mill's process wastewater. Some stormwater is discharged directly to Garrision Creek on the mill's south side and Unnamed Creek on the mill's north side. The sources of all but one of these direct discharges, consist of overflow from the freshwater wells. The exception is a parking lot. These untreated stormwater discharges are not related to industrial activity.

The previous permit required the permittee to develop, implement, and comply with the Stormwater Pollution Prevention Planning (SWPPP) guidance for Industrial Facilities, published by Ecology. The permittee was thereby required to develop a best management plan (BMP). The permittee will be required by the proposed permit to update the previous BMP and follow the stormwater pollution prevention plan.

FILTER PLANT BACKWASH'S BEST MANAGEMENT PLAN

The previous permit included a best management plan to discharge the filter backwash into Chambers Creek. The following three conditions defined the BMP plan:

1. Chemical treatment will not be used at the filter plant prior to discharge.
2. TSS from the filter plant backwash shall not exceed 50 mg/L in concentration for a weekly average.
3. TSS from the filter plant backwash shall be monitored three (3) times per week on a 24-hour composite basis and reported to Ecology on the monthly report.

Ecology kept this condition in the proposed permit.

TREATMENT SYSTEM OPERATING PLAN

In accordance with state and federal regulations, the Permittee is required to take all reasonable steps to properly operate and maintain the treatment system (40 CFR 122.41(e)) and WAC 173-220-150 (1)(g). A treatment system operating plan update was required by the previous permit. Ecology determined that implementation of the procedures in that Treatment System Operating Plan would reasonably ensure compliance with the terms and limitations in the NPDES permit. Upon restart of operations, Abitibi must update the plan and maintain it on site during the term of this permit.

GENERAL CONDITIONS

General Conditions are based directly on state and federal laws and regulations. They apply to all individual industrial NPDES permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control its production in order to maintain compliance with its permit. Condition G10 prohibits the reintroduction of removed substances back into the effluent. Condition G11 states that the Department will modify or revoke and reissue the permit to conform to more stringent toxic effluent standards or prohibitions. Condition G12 incorporates by reference all other requirements of 40 CFR 122.41 and 122.42. Condition G13 notifies the Permittee that additional monitoring may be established by the Department. Condition G14 requires the payment of permit fees. Condition G15 describes the penalties for violating permit conditions.

PERMIT ISSUANCE PROCEDURES

PERMIT MODIFICATIONS

The Department may modify this permit to impose numerical limitations, if necessary to meet Water Quality Standards for Surface Waters, Sediment Quality Standards, or Water Quality Standards for Ground Waters, based on new information obtained from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

The Department may also modify this permit as a result of new or amended state or federal regulations.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics, protect human health, aquatic life, and the beneficial uses of waters of the State of Washington. The Department proposes that this proposed permit be issued for five years.

REFERENCES FOR TEXT AND APPENDICES

Environmental Protection Agency (EPA)

1. 1992. National Toxics Rule. Federal Register, V. 57, No. 246, Tuesday, December 22, 1992.
2. 1991. Technical Support Document for Water Quality-based Toxics Control. EPA/505/2-90-001.
3. 1988. Technical Guidance on Supplementary Stream Design Conditions for Steady State Modeling. USEPA Office of Water, Washington, D.C.
4. 1985. Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water. EPA/600/6-85/002a.
5. 1983. Water Quality Standards Handbook. USEPA Office of Water, Washington, D.C.Tsivoglou, E.C., and J.R. Wallace.
6. 1972. Characterization of Stream Reaeration Capacity. EPA-R3-72-012. (Cited in EPA 1985 op.cit.)
7. Washington State Department of Ecology. 1994. Permit Writer's Manual. Publication Number 92-109
8. Wright, R.M., and A.J. McDonnell.1979. In-stream Deoxygenation Rate Prediction. Journal Environmental Engineering Division, ASCE. 105(EE2). (Cited in EPA 1985 op.cit.)
9. 1985. Dissolved Trace Metals in the Surface Waters of Puget Sound, NOAA/Pacific marine Environmental Laboratory, Paulson, A. J. and Feely, R. A.

APPENDIX A--PUBLIC NOTICE INFORMATION

The Department tentatively proposes to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations that are described in the rest of this fact sheet.

The Department published a Public Notice of Draft (PNOD) on September 1, 2005 in the *Tacoma News Tribune* to inform the public that a draft permit and fact sheet were available for review. Interested persons were invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents were available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the Industrial Section office in Lacey. Copies were also available for reading at the reference desk of the Tacoma Main Public Library. And the documents were posted on –and could be down loaded from— http://apps.ecy.wa.gov/industrial/proposed.

Interested persons must have delivered their written comments by close of business October 3 to:

Teddy V. Le, P.E.
Department of Ecology
Industrial Section
300 Desmond Drive
Lacey, WA

Teddy V. Le, P.E.
Department of Ecology
Industrial Section
P. O. Box 47706
Olympia, WA 98504-7600

Any interested person who asked to be included on our mailing list received either a printed or an electronic copy of the Public Notice (attached) depending on the stated preference for postal or electronic mail. The Public Notice mail out contained general information about the contents of the documents and told where to find them.

Comments referenced specific text followed by a proposed modification or concern, when possible. Comments could address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department considered all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue a renewal permit. The Department's response to all significant comments is available upon request and will be mailed directly to people who expressed an interest in this permit.

Further information may be obtained from the Department by telephone, (360) 407-6940, or by writing to the address listed above.

This permit and fact sheet were written by Teddy Le.

APPENDIX B--GLOSSARY

Acute Toxicity--The lethal effect of a compound on an organism that occurs in a short period of time, usually 48 to 96 hours.

AKART--An acronym for "all known, available, and reasonable methods of treatment".

Ambient Water Quality--The existing environmental condition of the water in a receiving water body.

Ammonia--Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation--The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD_5--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD_5 is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass--The intentional diversion of waste streams from any portion of a treatment facility.

Chlorine--Chlorine is used to disinfect wastewaters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

Chronic Toxicity--The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

Clean Water Act (CWA)--The Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity--Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring –Uninterrupted, unless otherwise noted in the permit.

Critical Condition--The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Dilution Factor--A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the percent effluent fraction e.g., a dilution factor of 10 means the effluent comprises 10% by volume and the receiving water 90%.

Engineering Report--A document which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Fecal Coliform Bacteria--Fecal coliform bacteria are used as indicators of pathogenic bacteria in the effluent that are harmful to humans. Pathogenic bacteria in wastewater discharges are controlled by disinfecting the wastewater. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces.

Grab Sample--A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Major Facility--A facility discharging to surface water with an EPA rating score of > 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Maximum Daily Discharge Limitation--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Minor Facility--A facility discharging to surface water with an EPA rating score of < 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Mixing Zone--An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The area of the authorized mixing zone is specified in a facility's permit and follows procedures outlined in state regulations (Chapter 173-201A WAC).

National Pollutant Discharge Elimination System (NPDES)--The NPDES (Section 402 of the Clean Water Act) is the Federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the State of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both State and Federal laws.

pH--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Responsible Corporate Officer-- A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Technology-based Effluent Limit--A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

State Waters--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Upset--An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C – RESPONSE TO COMMENTS

PEOPLE FOR PUGET SOUND

Comment No. 1

The fact sheet is significantly incomplete and has errors. Some examples include the lack of clarity on page 6 of the source of information for Wastewater Characterization. Is it based on monthly or weekly data and what range of dates is it based on? In addition, the temperature listing on page 6 is 29 degrees C whereas on page 14 temperature of effluent is listed at 35.6 degrees C – a significant difference.

Response:

- The most recent data we have for our priority pollutant scan analysis (wastewater characterization) of the discharge prior to the shutdown was in 2001. The information presented on page 6 of the fact sheet reflects the normal operation of the wastewater facility before the shut down at the Abitibi. During the renewal NPDES application in 2005, the sampling activity was not possible due to the non-production status. The mill at the time did not generate a representative discharge. If samples collected from this non-production status, then they will not be considered as representative as required by Section S.2.A of the permit, Sampling and Analytical Procedures, and will not conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the *Standard Methods for the Examination of Water and Wastewater* (APHA). In recognizing that new data of the mill's discharge are necessary, the Department requires that the mill resume a pollutant scan sampling using the EPA guideline as stated in the section when it reactivates. Also, the Department requires as a permit condition that the mill must submit a new renewal permit application no later than 180 days after the start-up, including an effluent pollutant scan report as specified in S.1.F.

- There is a difference in temperature of the effluent discharge on page 6 and 14 of 29 and 35.6 degrees Celsius, respectively. The Department realizes the difference, but it is not a discrepancy. For the first temperature, it is an immediate result of a grab sample during the pollutant scan sampling activity; i.e. 29 degrees. The other represents a result of a long term averaging temperature of a computer simulation activity using the worst case scenarios. The model is an EPA certified computer model, UDKHDEN.

Comment No. 2

The mill has not operated since January 2001. Current discharge conditions are not available and therefore we have no way to evaluate the ability of the permit to protect aquatic life in Puget Sound.

Response:

The impact to aquatic life around the discharge when the mill is in non-production status with no process wastewater to the bay is insignificant. For over three years, effluent flow is approximately 3.6 % of normal. This flow composes of storm water and various fresh water sources and no process wastewater. In this period BOD and TSS discharges are substantially lower than the permit limits, 0.05% and 0.1%, respectively. In December 2001, the Department issued an order to suspend certain aspects of its monitoring frequency and NPDES requirements, which were imposed as if the facility is in normal operating mode. The Department also determined through this order that the discharge level during the non-production status are of insignificance. However, we recognize that a new permit application will be necessary and must be therefore submitted by the mill to Ecology for evaluation of the discharge after the reactivation. This requirement is already proposed as in Condition S.1.F.

Comment No. 3

The permit does not state that a new permit will be required before operations can resume at the site. I understand from Ecology staff that the site owner wishes to sell the property and has requested an active permit for that purpose. It does not make sense for Ecology staff to waste their time on a permit that does not have any real basis and so it seems reasonable to issue an interim permit that clearly states that if operations are resumed at the site (either continuing the old operations or a new use) that a new permit must be obtained.

Response:

Ecology already proposed during the public notice a condition to require the mill submit a new permit application for evaluation of the discharge after reactivation. A similar requirement stated in Condition G.4 that if the facility modifies its operation or whenever a material change to the facility or in the quantity or type of discharge, then it must submit a permit application and engineering plan and reports at least 60 days prior to the change of process. Condition S.1.F in the permit specifies this requirement.